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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,131	11/19/2003	Hideshi Onishi	225270	7268

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EXAMINER

WU, IVES J

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/717,131	Applicant(s) ONISHI ET AL.	
	Examiner Ives Wu	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/24/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

(1). Applicants' Amendments and Remarks filed on June 20, 2006 have been received and acknowledged.

Claim 1 is amended. Claims 9-13 are newly added.

The rejections of claims 1-8 in prior Office Action dated March 20, 2006 is withdrawn in response to the Applicants' Amendments filed on June 20, 2006.

However, a new ground of rejection for claims 1-13 is introduced in the following paragraphs.

Claim Objections

Claims 10-13 are objected to because of the following informalities: In claims 10-13, it cites "rein layer", it would be proper to cite "resin layer". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(2). **Claims 1 - 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwanami et al (US004954557) in view of Onishi et al (EP-1043361A1).

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(3). As to polyolefin resin A, a saponified product C of an ethylene-vinyl acetate copolymer having an ethylene content 75-95 mol% and a saponification degree of a vinyl acetate component of not less than 85 mol% and a hydrotalcite compound D in a resin composition in **independent claim 1**, Iwanami et al (US004954557) disclose a mixture of a hydrolyzed ethylene-vinyl acetate copolymer having ethylene content of 20 – 80 mol% and a degree of hydrolysis in the vinyl acetate units of at least 90 mol%, and an olefin resin, the improvement which comprises melt-molding mixture in the presence of a hydrotalcite solid solution (Abstract, line 1-8).

As to metal soap B of the formula (1), obtained by a heat reaction by a dry direct method of one or more kinds of aliphatic monocarboxylic acid having 12 to 30 carbon atoms and an oxide or hydroxide of group II metal of periodic table in **independent claim 1**, Iwanami et al **teach** the metal salt of the higher fatty acid D having 10 to 22 carbon atoms (Col. 2, line 47-49).. Examples of higher fatty acid include lauric acid, myristic acid and the like. Example of metal salts are, alkali metal salts such as a sodium salt, potassium salt, alkaline earth metal salts such as magnesium salt and the like (Col. 5, line 3-14).

Iwanami et al **do not teach** the metal soap of formula (1) in instant claim 1.

However, Onishi et al (EP-1043361A1) **teach** the metal soap with the formula as claimed, and obtained by reacting one or more species of aliphatic monocarboxylic acid containing 12 – 30 carbon atoms with an oxide or hydroxide of a metal belonging to group 2 of the periodic table by a dry direct method (page 1, (57)).

The advantages of using dry direct method to obtain the metal soap with the formula as claimed is to have metal content greater than the equimolar amount by 0.1 ~ 1.0 where other methods are difficult to get this metal content ([0028], line 5-6, 7-10).

Therefore, it would have been obvious at time the invention was made to employ the dry direct method of Onishi et al to obtain the metal salt of Iwanami et al in order to acquire the above-mentioned advantage. Moreover, the metal salt disclosed by Iwanami et al is genus, the metal soap of Onishi et al is species, one of ordinary skills in the art would recognize that all species work well for genus, motivated by a reasonable expectation of success. *In re O'Farrell*, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988).

(4). As to content of metal soap to be 0.005 – 20 wt% in **claim 2**, Onishi et al disclose the metal soap being preferably 0.005 ~ 1 % parts by wt based on 100 parts by wt of EVOH ([0029]).

As to limitation of **claims 3 and 4**, Iwanami et al disclose the amount of EVOH and Olefin resin in Table 1, which meets the wt ratio as claimed such as Example 1,4 and 5 (Col. 7 & 8).

As to collected material of a laminate comprising a saponified product of an ethylene-vinyl acetate copolymer having ethylene content of 20 – 65 mol% and a saponification degree of a vinyl acetate component of not less than 90 mol% in **claims 5-8**, Iwanami et al a mixture of a hydrolyzed ethylene-vinyl acetate copolymer having ethylene content of 20 – 80 mol% and a degree of hydrolysis in the vinyl acetate units of at least 90 mol%, and an olefin resin, the improvement which comprises melt-molding mixture in the presence of a hydrotalcite solid solution (Abstract, line 1-8). Iwanami et al disclose the laminate composed of a layer of the patentee's invention and layer of other resin. The laminates can have any layer structures (Col. 6, line 14-20).

As to limitation of **claim 9**, the disclosure of Iwanami et al, Onishi et al is incorporated herein by reference, the most subject matters of saponified product of an ethylene-vinyl acetate copolymer having ethylene content of 75 – 92 mol% and a saponification degree of a vinyl acetate component of not less than 85 mol% as claimed has been recited in applicants' claim 1 in a broader range, and has been discussed in paragraph (3).

As to limitation of **claims 10 - 13**, Iwanami et al disclose that the laminate can have any layer structures, a multi-layers structure such as (a)/(b)/(a), (b)/(a)/(b), (b1)/(b2)/(a), (a)/(b)/(a)/(b)/(a) as well as two-layer structure such as (a)/(b) (Col. 6, line 14-26). Therefore, it would include the layer structures comprising patentee's layer of invention and higher gas barrier resin layer such as EVOH (Col. 6, line 3) and another thermoplastic resin layer (Col. 6, line 8) and forms to a ground laminate as currently claimed.

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ives Wu whose telephone number is 571-272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Ives Wu
Art Unit: 1724
Date: July 25, 2006

DUANE SMITH
PRIMARY EXAMINER

D. Smith
7-25-06